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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,495	07/22/2002	Michael C. Murray	08CE7421-1	4852

23413 7590 01/25/2005

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EXAMINER
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VIJAYAKUMAR, KALLAMBELLA M

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/064,495	<b>Applicant(s)</b> MURRAY, MICHAEL C.	
	<b>Examiner</b> Kallambella Vijayakumar	<b>Art Unit</b> 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/12/2004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

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Detailed Action

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Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-19 are pending with the application.

The information disclosure statement (IDS) submitted on 11/12/2004 is in compliance with the provisions of 37 CFR 1.97, and accordingly, the examiner has considered the information disclosure statement.

*Claim Rejections - 35 USC § 102*

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 6 and 13-17 rejected under 35 U.S.C. 102(b) as being anticipated by Campbell (US 5,360,861).

Campbell discloses a molding thermoplastic polymer composite comprising:

- (A) a polyester-carbonate resin that would meet the limitation of the polycarbonate in claim-1 (Col-1, Ln 64-68),
- (B) 0.1 to 20% by wt. of a fibrous reinforcing agent such as glass fibers (Col-6, Ln 3-5)

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(C) 0.1 to 20 wt.% organopolysiloxane-polycarbonate block copolymers as impact-modifiers that would meet the limitation of claims 1 and 6 (Col-11, Ln 50-53).

(D) antistatic agents that would meet limitation of claim-1 (Col-12, Ln 36-39) and

(E) 0.01 to about 20 wt.% of the aromatic sulfonate fire-retarding agents would meet the limitation of claims 1 and 13 (Col-14, Ln 1-4).

The antistatic property of the polymer per the claim-1 would be inherent due to the presence of the antistatic agent/s (D) in the composition. The glass fibers would further meet the limitation of flame retardants, and the composition for samples 6-8 in Table-1 thereby would meet the limitation of the component ratios in claims 1-2, 6 and 13 (Col-16, Tbl-1). The flammability rating for the polymers ranged from V0, V1 and V2, and the flammability test data along with the notched izod values for the samples 6-8 would meet limitation of these values in the claims 13-16 (Col-14, Ln 49-60, Col-16, Tbl-1), and the surface resistivity values for the polycarbonate polymers in these claims would be inherent because the composition and the constituents of the polymers by Campbell are identical to those by the applicants in the instant claims. The test sample bars would meet the limitation of an article in claim-17 (Col-14, Ln 55). All the limitations of the instant claims are met.

The reference is anticipatory.

*Claim Rejections - 35 USC § 103*

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka (JP 11-199,767) in view of Campbell (US 5,360,861) or Campbell et al (US 6,221,939) or Willaim et al (GB 2 043083).

Kataoka discloses a flame-retardant/antistatic-resin composition comprising of:

- (A). 50-80% aromatic polycarbonate that would meet the limitation of polycarbonate and its ratio in claims-1, 2, 18 and 19 (Abstract, Section 0011),
- (B). 4.5-15% polyetheresteramide would meet the limitation of antistatic agent and its ratio in claims 1, 3, 4, 18 and 19,
- (C). 3-12% phosphoric ester would meet the limitation of flame-retardant and its ratio in claims 1, 7-9, 13, and 19 (Sec. 0025-0030),

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(D) 1-25% inorganic fillers,

(E) 0.5-8 % rubbery polymer/s such as copolymers of organosiloxane, methyl methacrylate and methyl acrylate would meet the limitation of impact modifier and its ratio in claims 5-6 (Section 0038-0040) and

(F). 0.05-1.5 % PTFE fibrils.

The polycarbonate composite resins further exhibited a V-0 rating for flammability in the UL-94 protocol and had a surface resistance of  $1 \times 10^{14}$  ohms or less per the limitation of claims 14-16 (Abstract, Sections:0009, Table-1; Sec 0048). However the polycarbonate compositions of Kataoka et al are similar to those by the applicants, and IZOD values per the claims 13-16 would have been obvious. With reference to the method claim-19, Kataoka discloses making the Flame-retardant antistatic polycarbonate composition in an extruder using the components that are similar to those claimed by the applicants (Sec 0046).

Kataoka discloses composition of the polycarbonate antistatic composition having all the components in appropriate ratios per the limitations of the instant claims **except** (a)-the use of polycarbonate-polysiloxane copolymer as impact modifier per claims-1, 18 and 19; (b)-addition phosphate ester flame retardants per the claims 8, 11-12 and 18; (c)- phosphoramides per claim 10 per the limitations of instant claims by the applicants.

In the analogous art, Campbell (US-861) teaches the composition and making of flame-resistant polycarbonate compositions comprising about 0.1 to 20 wt% organopolysiloxane-polycarbonate block copolymers as impact-modifiers per the limitations of claims 1, 18 and 19, and its benefits (Col-11, Ln 50-53). Campbell further teaches the use of polyacrylic copolymers as impact modifiers in the polycarbonate compositions (Col-8, Ln 41-46).

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In the analogous art, Campbell et al (US-939) teach the composition of flame-resistant polycarbonate, composition comprising of flame retardants such as a phosphoramidate per instant claim 10 (Col-7, Ln 29-50), organic phosphate esters (Abstract, Col-12, Ln 23-44), N,N'-bis-[di-(2,6-xylyl)phosphoryl]piperazine (XPP), resorcinol bis(diphenyl phosphate) (RDP) and bisphenol A bis(diphenyl phosphate) (BPADP) ) per the instant claims 11-12 and 18 (Col-13, Ln 54-64; Col-14, Ln 21-23; Col-15, Example-1).

In the analogous art, William et al teach the use of various organo-phosphorus flame retardants in the formulation of thermoplastic based flame-retardant compositions, wherein the flame retardants included bi and poly-functional phosphate esters, and triphenyl phosphate per the limitations of instant claims 7-9 and 19 (Abstract, page-1, Line 44 to Page-2, Line-48; Pages-4, Table-1; Page-8, Claims-1-5).

It would have been obvious to one with ordinary skill in the art to modify the anti-static/flame-retardant polycarbonate compositions of Kataoka by including organopolysiloxane-polycarbonate copolymer as the impact modifier per the teachings of Campbell (US-861) to benefit from improved resistance to the oxidation and elastic properties because Campbell teaches the addition of the polysiloxane-polycarbonate copolymer and acrylate copolymers as impact modifiers for polycarbonates in the analogous art, and further combine with the teachings of either Campbell (US-939) or William (GB-083) by using phosphoramides and/or organic phosphates flame retardants to benefit from enhanced flammability resistance properties per their teachings, and with the expectation of reasonable success because all the teachings are in the analogous art.

### *Conclusion*

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on M-Th, 07.00 - 16.30 hrs, Alt. Fri: 07.00-15.30 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMV  
January 14, 2005.

  
Mark Kopec  
Primary Examiner